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PICTURE OF THE MONTH
Multiple Tropical Storms in the Western North Pacific

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The first half of July 1972 was a notable chronicle for unusual tropical activity in the western North Pacific. No less than four tropical cyclones originated and developed to typhoon strength ($\geq$64 kt) within a period of a week. The ESSA 9 mosaic for July 1972 (fig. 1) illustrates this situation most graphically by recording the simultaneous presence of four tropical storms between the South China coast and the Marshall Islands. Three typhoons (Phyllis, Rita, Tess) and one tropical storm (Susan) are portrayed in the mosaic.

Rita is stalled in the Philippine Sea east of Luzon Island, Philippines, and is generating 100-kt winds at this time. Centrally located in the mosaic and northeast of Rita is Phyllis, which was moving on a northwest course with accompanying winds of 100 kt. Susan was drifting slowly northward off the South China coast with 45-kt winds after dropping from typhoon intensity about 48 hr previously. Tess, the easternmost storm, is rapidly gaining strength north of Eniwetok Atoll with 85-kt winds while charting a westward course.

With the exception of August 1960, no other period on record in the western North Pacific has witnessed such a

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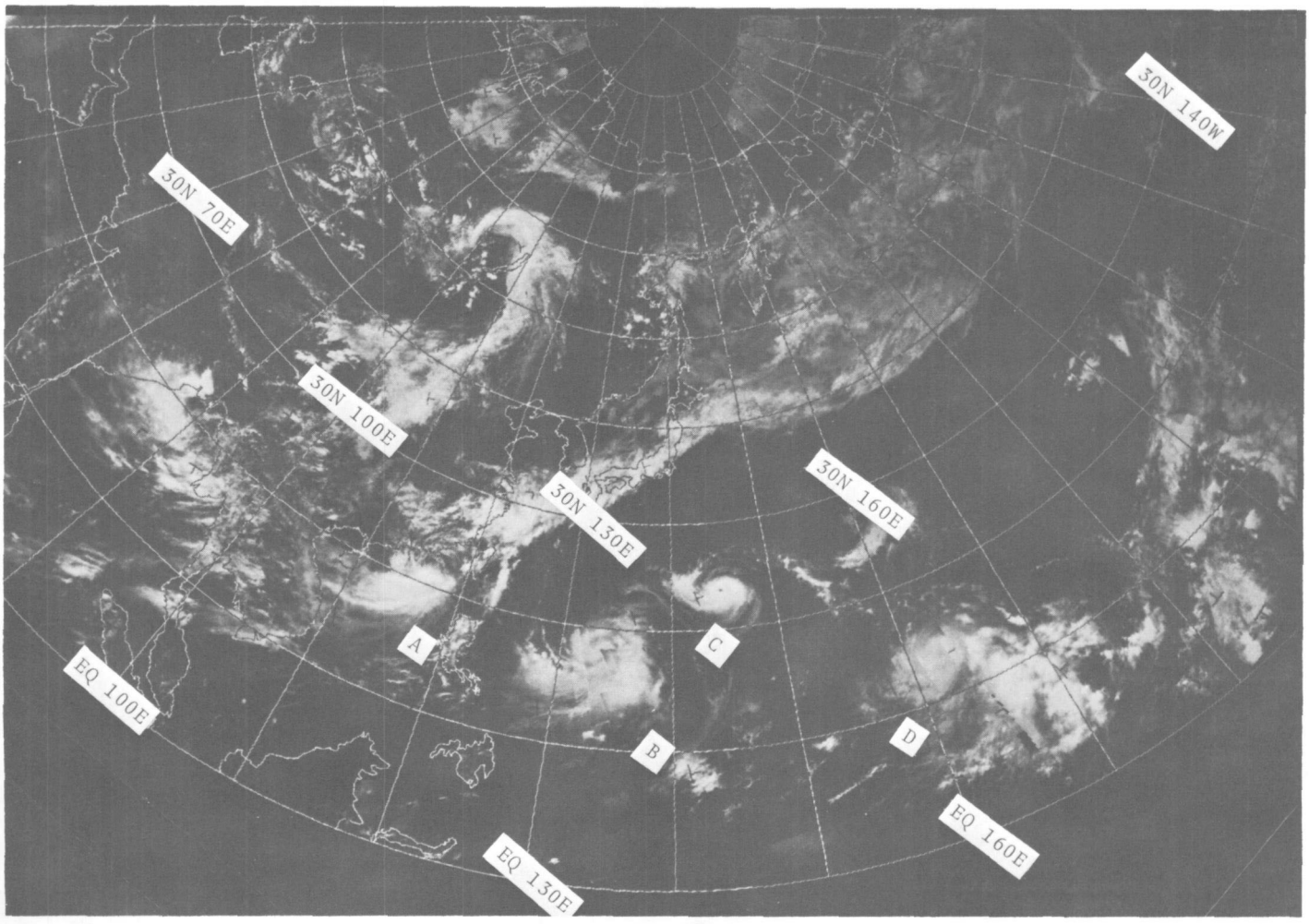

FIGURE 1.—ESSA 9 satellite mosaic for July 13, 1972, showing multiple tropical storms—(A) tropical storm Susan and typhoons (B) Rita, (C) Phyllis, and (D) Tess—in the northwest Pacific Ocean.

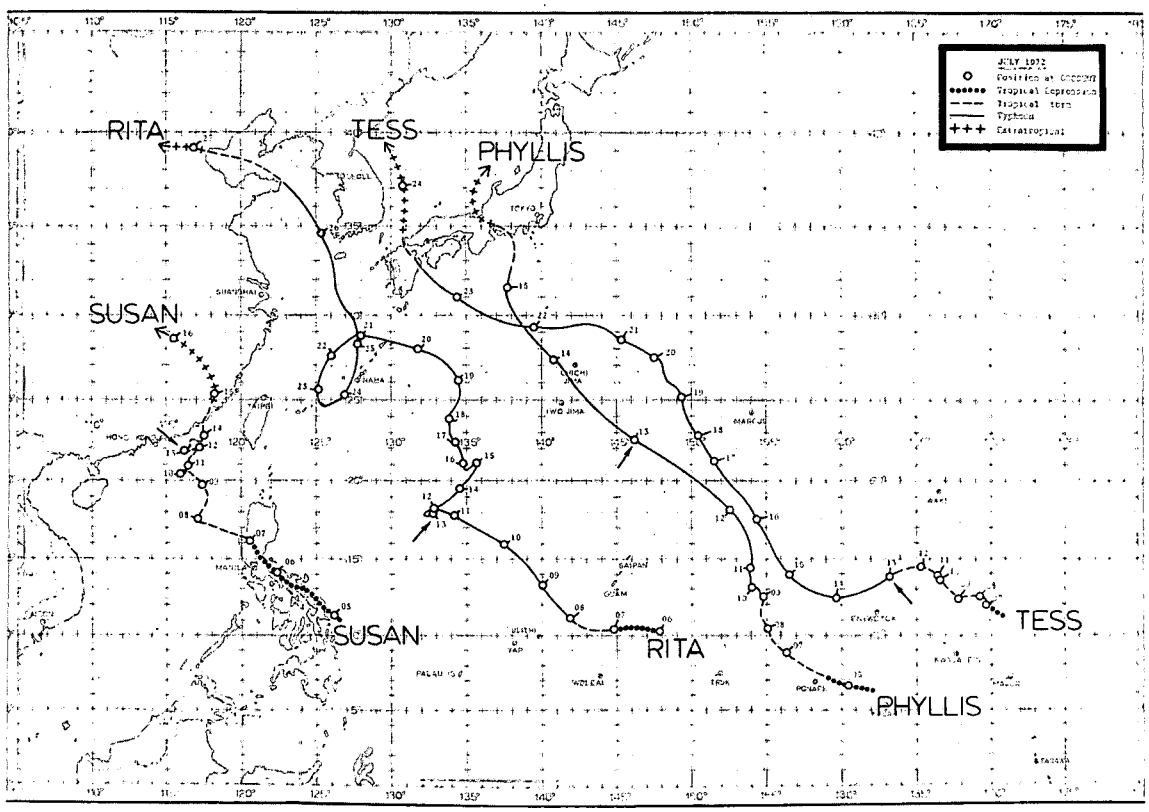

FIGURE 2.—Tracks of typhoons Phyllis, Rita, Tess, and Susan during July 1972. Arrows indicate storm position at the time of figure 1.

simultaneous number of developed tropical storms. Also of marked significance was the duration and intensity of these multiple systems, which set several individual climatological records. Four systems existed simultaneously with tropical storm strength or greater for an 8-day period (July 7–14). During 4 days (July 12–15), Rita, Tess, and Phyllis were of concurrent typhoon strength, each reaching maximum sustained winds of 110 kt or greater.

Probably the most noteworthy of these typhoons was Rita, which persisted as a tropical cyclone for 22 days (July 6–27), setting a record for longevity in the western Pacific. Reaching maximum winds of 150 kt on the 11th, Rita possessed typhoon strength winds for 18½ days. Her track described an unusual 4-day loop through the Ryukyu Islands, causing havoc to its inhabitants (fig. 2).

Both Rita and Susan were responsible during much of their lifetimes for an intensification of the southwest monsoon flow over Luzon Island that caused additional rainfall in an area experiencing its worst floods since World War II.